#### **ASBESTOS SURVEY**

MFR ASR - Medford, Oregon

PERFORMED FOR:
Federal Aviation Administration
Mr. Steve Mares
1601 Lind Avenue Southwest
Renton, WA 98057

#### **PERFORMED BY:**

Ms. Janelle Cass
AHERA Building Certification #104406
&
Mr. Ian Quiñones
AHERA Building Certification #1030503

Federal Aviation Administration Seattle Infrastructure Engineering 1601 Lind Avenue Southwest Renton, WA 98057

**DATE PREPARED**: 6 Nov 2009

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#### 1.0 NTRODUCTION

This report presents the results of the asbestos survey performed by Janelle Cass and Ian Quiñones, Environmental Safety & Occupational Health (EOSH), on the Federal Aviation Administration building known as the *MFR ASR* located at Medford Oregon.

This report was prepared based on information obtained during our site visit conducted on 28 Oct 09 and the laboratory results of bulk samples of suspected building materials collected during the site visit. This survey report is not intended for, nor should be used as a design specification.

#### 2.0 SCOPE OF WORK

The scope of services proposed and performed included the following:

- Perform a field survey to evaluate suspected building materials in the interior and exterior of the structures on the property and document the existing site conditions in those areas. Sampling was done with limited destructive methods.
- Collect bulk samples of friable and non-friable suspected asbestos-containing materials for laboratory testing.
- Prepare this survey report including sample location sketches and recommendations for asbestos abatement actions (if require).

#### **Asbestos-Containing Materials (ACM's)**

- Bulk sampling and analysis of ACM's.
- Quantity estimates of ACM's
- Written descriptions of bulk samples including sketch with sample locations.
- Written report including sample logs, descriptions, sketches and recommendations.

#### 3.0 PROCEDURES

All personnel participating in asbestos inspections have received training as detailed in the Asbestos Hazard Emergency Response Act (AHERA), 29 CFR Part 763 and are accredited asbestos building inspectors.

Samples locations for this survey were chosen in a random fashion, with emphasis being placed on obtaining samples of each type of accessible suspected material, while minimizing damage to the material being sampled. Samples were collected by carefully removing small portions of the suspected material in a non-abrasive manner. If possible, samples were collected from existing damage areas. Immediately after collection, samples were place in plastic containers. Samples containers were then placed in a large re-sealable plastic bag for transportation to the laboratory. Data pertinent to each sample such as date, sample number, material description and material condition were recorded on a field date sheet.

Asbestos bulk samples were sent under appropriate chain-of-custody procedures to Pacific Rim Environmental (PRE), Inc. in Seattle, Washington for analysis. The samples were analyzed in accordance with method EPA-600/R-93/116, "Method for Determinations of Asbestos in Bulk Building Materials (polarized light microscopy/dispersion staining techniques)". Detection limits for this type of analysis are approximately one percent by volume. Materials containing one percent asbestos or more are considered to be asbestos-containing materials.

Laboratory analysis report is attached.

#### 4.0 FIELD OBSERVATIONS

The building MFR ASR was inspected for suspected material near the Medford Airport located in Medford, Oregon. The structure was built in 1990's. The building consists of reinforced CMU material on a concrete slab foundation. The structure was considered to be in "good" conditions.

Suspected building materials that will be impacted by any future renovation and/or demolition consist of EG exhaust insulation wrap (white woven & light blue wrap, chalky, fibrous insulation) and EG exhaust exit caulking (white to light gray, fibrous insulation material with white paint fragments).

**Note:** This inspection report is meant only to inventory ACM at the site. Some suspected materials may have not been sampled due to the severe destructive methods needed to sample or were found to be inaccessible at the time of the inspection.

Suspected ACM within the structure were identified and classified as either a surfacing material, thermal system insulation or miscellaneous material. Surfacing materials are those which are either spray applied or toweled-on for acoustical, decorative or fireproofing purposes. Thermal system insulation is insulation used to inhibit heat transfer or to prevent condensation on pipes, boilers, tanks, ducts and various other components. Miscellaneous materials included all other materials not included in the above categories such as floor tiles, ceiling times, roofing felt, cementitious material, wallboard systems and products such as caulking, mastics and putties.

A total of two samples were collected and submitted to PRE laboratories. Asbestos material was not detected on either of the two suspected ACM's.

#### 5.0 ASBESTOS-CONTAINING MATERIAL (ACM) SURVEY NARRATIVE

Bulk samples collected were submitted for sample analysis in accordance with method EPA-600/R-93/116: "Method for Determination of Asbestos in Bulk Building Materials". Analyses were performed in Pacific Rim Environmental, Inc. Materials are positive for asbestos if they are found to contain 1% or greater with asbestos.

#### Thermal Systems Insulation (TSI)

Suspected *white woven (layer 1) and light blue chalky-fibrous insulation wrap* around the EG exhaust was identified. The material was sampled and was not found to contain ACM.

No other suspected TSI was found and sampled during the inspection. If during the course of renovation or demolition of walls, ceiling tiles or other areas additional TSI materials that are not listed in this report are uncovered, sampling *must* be performed prior to their disturbance.

#### **Surfacing Materials**

No suspected surfacing material was found and sampled during the inspection. If during the course of wall, ceiling tiles or other renovations or demolition, any additional surfacing materials that are not listed in this report are uncovered, sampling <u>must</u> be performed prior to their disturbance.

#### Miscellaneous Materials

Suspected white to light gray caulking, fibrous insulation material with white paint fragments around the EG exhaust exit was identified. The material was sampled and was not found to contain ACM.

#### **6.0 STATEMENT OF COMPLIANCE**

In accordance with local, state and federal regulations, Federal Aviation Administration performed an asbestos survey of the structure (MFR ASR) located in Medford, Oregon. Should employees or contract personnel encounter any suspected ACM's they should:

- 1. Contact a representative of the owner
- 2. Consult the inspection report to determine whether or not the suspected material contains asbestos
- 3. If the suspected material does not appear in the inspection report, then that material was not sampled and must be presumed to contain asbestos until proven otherwise by sampling analysis.

*None* of the bulk samples taken came out positive for asbestos.

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The inspection report has been made available to me. I will inform subcontractors of the location and types of materials collected. I am authorized to sign on behalf of my company.

Contractor:	Owner's Rep:
Signature:	Signature:
Print Name:	Print Name:
Title:	Title:
Date:	Date:

## APPENDIX A ASBESTOS SAMPLE SUMMARY

#### TABLE 1

# SUMMARY OF MATERIALS SUSPECTED TO CONTAIN ASBESTOS AND LABORATORY RESULTS FOR THE MFR AS IN MEDFORD, OR

Material Number	Material Description	Laboratory Results		
MFR ASR EG #1	EG Exhaust Insulation, white woven (layer 1) and light blue chalky-	ND		
	fibrous insulation wrap			
MFR ASR EG #2	EG Exhaust Exit Caulking, white to light gray caulking, fibrous	ND		
	insulation material with white paint fragments			

NS = Material Not Sample ND = No Asbestos Detected PACM = Presumed Asbestos Containing Material

#### APPENDIX B LABORATORY ANALYSIS DATE SHEET





#### **BULK SAMPLE ANALYSIS REPORT**

CLIENT: Federal Aviation Administration

1601 Lind Avenue S.W.

Renton, WA 98055

PROJECT: MFR ASR/LMT FMP

Medford & Keno, OR

**SAMPLE DATE:** 10/28/2009

CONTACT: Ian Quinones

TURNAROUND: 3-5 Days

PRE#: 2009.1339

REPORT #: 2009-10-419

DATE RECEIVED: 10/30/2009

ANALYST: William F. Golloway

DATE ANALYZED: 11/03/2009

REPORT BY: Dai Le

REPORT DATE: 11/04/2009 PAGE: 1 of 2

Attached are the results of analysis of 5 bulk samples submitted for asbestos identification: lab ID #2009-10-419 through 2009-10-423.

The samples were analyzed in accordance with method EPA-600/R-93/116: "Method for the Determination of Asbestos in Bulk Building Materials".

Unless otherwise noted, the samples were inhomogeneous; subsamples of components were analyzed to achieve representative analysis. Separate layers of layered samples are analyzed and reported separately. Unless otherwise stated, asbestos content was quantified by calibrated visual estimation (CVES). CVES concentrations are reported in 2 to 3 percent ranges for fiber concentrations ranging from 1-10%, and 5 percent ranges for concentrations greater than 10%. Samples in which asbestos was not observed are reported as "none detected".

#### Limitations and Uncertainty:

Factors such as sample quality, sample size, interfering matrix material, fiber size, and fiber concentration contribute to the uncertainty of asbestos concentration measurements in bulk materials. Relative errors exceeding 100% may occur in samples containing <1-10% asbestos. Relative errors are typically below 30% in samples with greater than 10% asbestos, and approach zero as the asbestos concentration approaches 100%.

Asbestos fibers with diameters below approximately 0.25 micrometers are not detectable by PLM. These extremely fine fibers may occur in such products as floor tile, adhesives, and cement products. This limitation can be overcome, however, by the use of alternate analytical methods, such as Transmission Electron Microscopy (TEM).

The samples analyzed in this report were provided by third parties not subject to control by Pacific Rim Environmental, Inc. (PRE). Consequently, the results presented represent microscopic examinations in PRE laboratory facilities and PRE makes no representation as to sample collection techniques or procedures. Test results pertain only to the samples submitted for analysis.

This report cannot be represented by the client to claim product endorsement by NVLAP or any agency of the U.S. Government. This report shall not be reproduced except in full without written permission of the laboratory.

NVLAP Accredited LAB #: 101631-0 Samples submitted by: Third Party Reports

Reviewed By:

Approved Signatory

Corporate Office 6510 Southcenter Blvd., Ste. #4 Seattle, WA 98188 Phone: (206) 244-8965 Fax: (206) 244-9096 Anchorage Office Phone (907) 569-8081 www.pacrimenv.com

# Pacific Rim Environmental, Inc. BULK SAMPLE ANALYSIS REPORT

CLIENT: Federal Aviation Administration

PRE#: 2009.1339

1601 Lind Avenue S.W.

REPORT#: 2009-10-419

Renton, WA 98055

DATE RECEIVED: 10/30/2009

PROJECT: MFR ASR/LMT FMP

ANALYST: William F. Golloway

Medford & Keno, OR

DATE ANALYZED: 11/03/2009

SAMPLE DATE: 10/28/2009

REPORT BY: Dai Le

CONTACT: Ian Quinones

REPORT DATE: 11/04/2009

TURNAROUND: 3-5 Days

PAGE: 2 of 2

Client/Lab ID Number	Sample Location and Description	Asbestos Type(s) / %	Other Material(s)	Date Analyzed 11/03/09	
MFR ASR EG #1 2009-10-419	EG Exhaust Insulation Wrap. White woven wrap (layer 1) and light blue, chalky, fibrous insulation (layer 2).	Layer 1 (Wrap): None Detected  Layer 2 (Insulation): None Detected	Layer 1: Cellulose (80-85%), Fiberglass (<1%), Binder.  Layer 2: Fiberglass (<1%), Synthetics (3-5%), Binder, Mica, Mineral Aggregate.		
MFR ASR EG #2 2009-10-420	EG Exhaust Exit Caulking.  White to light gray, fibrous insulation material with white paint fragments.	None Detected	Cellulose (<1%), Fibrous Glass (80-85%), Binder, Paint, Mineral Aggregate, Metal.	11/03/09	

## PACIFIC RIM ENVIRONMENTAL, INC.

				Chain of Custody					PRE#: 2009, 1339				
CLIENT:		ral Aviation nistration	PO#:				S	SAMPLE TYPE:		TURNAROUND:			
ADDRESS:	1601 Li	nd Ave SW						X	ASBESTOS SAME	LE		SAME DAY	
	Renton,	WA 98057		PROJECT #:					LEAD SAMPLE			24 HOUR	
CONTACT:	Ian Quinones   Ian Quinones   Ian Quinones   Enn. gov   (425) 227-2408   (425) 227- 2984		PROJECT NAIVIE:		MFR ASR/LMT FMP Medford & Keno, OR		OTHER		X	Х	3-5 WORKING DAYS OTHER		
PHONE FAX													
SAMPLE DATE SAMPLE NUMBER			R	ANALYSIS TYPE   SAMPLE DESCR			IPTI(	ON / (	COMMENTS		11_		
28 Oct 09	MFR ASR EG #1			Asbestos		EG Exhaust Insula	ation	Wrap	)				
28 Oct 09	28 Oct 09 MFR ASR EG #2			Asbestos EG Exhaust Exit Caulking									
RELEASED BY: SIGNATURE		3	ATE: TIME: ACCEPTED		BY: SIGNATURE		DA		TIME:	474			
	ATION TO	RELEASE RESULTS	TO TH	HE FOLLOWIN	NG:								
CONTACT:			DATE. TIME:		FAX#:								
CORPORATE	OFFICE: 6	510 Southcenter Blvd., Suite	e 4, Tuk	wila, WA 98188:	Phone (2	06) 244-8965, Fax (206)	244-	9096.	Email: pre@pacrimenv	/.com			

#### INSPECTORS CERTIFICATIONS



1900 W. Nickerson, Suite 315 Seattle, WA 98119 (206) 285-3373



This certifies that Janelle M. Cass

has satisfactorily completed 4 hours of refresher training as an

Asbestos Building Inspector

complies with TSCA Title II / 40 CFR 763 (AHERA)

Instructor EPA Provider Cert. Number: 1085 Cert. Num:

104406

Class Date:

Sep 23, 2009

Expires:

Sep 23, 2010